



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,157	12/14/2001	Anja Knuppel	Beiersdorf 756 -KGB/BSL	1726

7590

01/09/2003

Bruce S. Londa  
Norris McLaughlin & Marcus  
30th Floor  
220 East 42nd Street  
New York, NY 10017

EXAMINER

WELLS, LAUREN Q

ART UNIT

PAPER NUMBER

1617

DATE MAILED: 01/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n No.

10/017,157

Applicant(s)

KNUPPEL ET AL.

Examiner

Lauren Q Wells

Art Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

Claims 1-10 are pending.

***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 12/18/00. It is noted, however, that applicant has not filed a certified copy of the German application as required by 35 U.S.C. 119(b).

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1617

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(i) Claims 1-10 provide for the use of polyurethanes, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

(ii) The terms "water-soluble" and "water-dispersible" in claims 1-2, 6 are relative terms which render the claims indefinite. The terms "water-soluble" and "water-dispersible" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Since water-soluble and water-dispersible are not clearly defined, how would one of ordinary skill know what polyurethanes are being referred to in the instant claims?

(iii) Claim 3 is vague and indefinite, as it is confusing. Is not an o/w formulation an emulsion?

(iv) Claim 5 is vague and indefinite, as it is confusing. What is an o/w formulation that is a hydrodispersion? The specification does not further define such a term and one of ordinary skill in the art, would not be apprised of its meaning.

(v) A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the

Art Unit: 1617

explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 8 (lines 2-6) recites the broad recitation "comprise. . .one or more water-soluble UV-A filter substances", and the claim also recites "particularly water soluble UV-A filter substances chosen from the group consisting of. . .and/or salts thereof" which is the narrower statement of the range/limitation; claim 8 (lines 5-7) recites the broad recitation "and/or salts thereof", and the claim also recites "particularly the corresponding sodium, potassium or triethanolammonium salts" which is the narrower statement of the range/limitation; claim 8 (lines 7-8) recites the broad recitation "10-sulfato compounds", and the claim also recites "in particular phenylene-1,4-bis(2-benzimidazolyl)-3,3'-5,5'-tetrasulfonic acid bis-sodium salt" which is the narrower statement of the range/limitation; claim 9 (lines 2-3) recites the broad recitation "bis-resorcinyltriazine derivatives", and the claim also recites "in particular 2,4-bis. . .triazine" which is the narrower statement of the range/limitation; claim 10 recites the broad recitation "benzotriazole derivatives", and the claim also recites "in particular 2,2'-methylenebis. . .phenol" which is the narrower statement of the range/limitation.

Art Unit: 1617

(vi) The term “customary UV filter substance” in claim 1 (line 3) is vague and indefinite, as it is not clear what compounds are encompassed by this phrase. What defines customary? What is a substance?

(vii) The term “UVA filter substance” in claims 6 (line 3), 8 (line 2) is vague and indefinite, as it is not clear what compounds are encompassed by this phrase. What is a substance?

(viii) Claim 8 recites the limitation "light protection preparations" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

(ix) Claim 8 is rejected for the use of improper Markush groups. See MPEP 2173.05(h) for examples of proper conventional or alternative Markush-type language (e.g., “. . .selected from the group consisting of. . .and . . .”). In claim 8, are the salts referring to the last named compound or do the salts refer to both compounds? What does the 10-sulfato compound refer to?

(x) Claims 9-10 recite the limitation "broadband filter" in lines 1. There is insufficient antecedent basis for this limitation in the claims.

(xi) The terms “group of bis-resorcinyltirazine derivatives” and “benzotriazole derivatives” in claims 9 and 10, respectfully, are vague and indefinite, as it is not clear what compounds are encompassed by these terms. What is the group of derivatives? The specification does not define these groups or the derivatives, and one of ordinary skill in the art would not be apprised of all the chemical possibilities encompassed by these terms.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1 and 6-7 is rejected under 35 U.S.C. 102(e1) as being anticipated by Anderle et al. (2002/0028875).

Anderle et al. teach platicized waterborne polyurethane dispersions and manufacturing processes. Disclosed are personal care compositions comprising the waterborne polyurethane dispersions and sunscreens. Exemplified is a sunscreen composition comprising sunscreen and 7.5% of the polyurethane dispersion. Thus, Anderle and the instant invention both teach compositions comprising a film-forming, water-soluble, water dispersible polyurethane and a UV filter substance. See pg. 21-22.

Claims 1 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Eisenhart et al. (EP 606749).

Eisenhart et al. teach a sunscreen comprising a polyurethane mixture. Exemplified is a sunscreen composition comprising 1% of a polyurethane mixture. Thus, Eisenhart et al. and the

instant invention both teach compositions comprising a film-forming, water-soluble, water dispersible polyurethane and a UV filter substance. See pgs. 10-12.

Claim 2 is rejected under 35 U.S.C. 102(e1) as being anticipated by Okawa (2001/0006032).

Okawa teaches an oil in water type resin comprising water-soluble polyurethane. Thus, the instant invention and Okawa both teach compositions comprising water-soluble polyurethane and o/w emulsion. See [0026].

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderle et al. in view of Ansmann et al. (6,280,712) and Koch et al. (6,258,963).

Anderle et al. is applied as discussed above. The reference lacks preferred sunscreens.

Ansmann et al. teach sun screen agents. 3-benzylidene camphor, 4-aminobenzoic acid derivatives, esters of cinnamic acid, esters of salicylic acid, and sulfonic acid derivatives such as 4-(2-oxo-3-bornylidenemethyl)-benzene sulfonic acid, are disclosed as interchangeable UV filters for use in sunscreen compositions. See Col. 2, line 15-Col. 4, line 12.

Koch et al. teach cosmetic compositions comprising UV absorbers. Aminobenzoic acid derivatives, salicylate derivatives, cinnamate derivatives, 2,2'-methylene-bis-(6-(2H-



Art Unit: 1617

benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)-phenol), and others are disclosed as traditional and interchangeable UV absorbers. See Col. 3, line 39-Col. 4, line 59.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the 4-(2-oxo-3-bornylidenemethyl)-benzene sulfonic acid of Ansmann or the 2,2'-methylene-bis-(6-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)-phenol) of Koch et al. to the composition of Anderle et al. because a) Anderle et al. teach aminobenzoic acid derivatives, salicylate derivatives, and/or cinnamate derivatives as sunscreens in his compositions, and Ansmann and Koch teach 4-(2-oxo-3-bornylidenemethyl)-benzene sulfonic acid and 2,2'-methylene-bis-(6-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)-phenol), respectfully, as interchangeable and combinable with aminobenzoic acid derivatives, salicylate derivatives, and/or cinnamate derivatives.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okawa et al. in view of Auweter et al. (2002/0110599).

Okawa et al. is applied as discussed above. The reference lacks microemulsions.

Auweter et al. that oil-in-water emulsions in the form of micro or macro emulsions is known. See [0203].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to teach the o/w emulsion of Okawa et al. as the microemulsion of Auweter et al. because Auweter et al. teach microemulsions as known forms of o/w emulsions. Furthermore, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lauren Q Wells whose telephone number is (703) 305-1878. The examiner can normally be reached on M-F (7-5:30), with alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell S. Travers can be reached on (703)308-4603. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.

lqw  
August 23, 2002



DAMERON L. JONES  
PRIMARY EXAMINER